VZCZCXRO9358 PP RUEHAST RUEHHM RUEHLN RUEHMA RUEHPB RUEHPOD RUEHTM DE RUEHSG #1046/01 3361726 ZNR UUUUU ZZH P 011726Z DEC 08 ZDK FM AMEMBASSY SANTIAGO TO RUEHC/SECSTATE WASHDC PRIORITY 4008 RUEHBU/AMEMBASSY BUENOS AIRES 1159 RUEHPE/AMEMBASSY LIMA 5826 RUEHAC/AMEMBASSY ASUNCION 3649 RUEHPE/AMEMBASSY LIMA 5827 RUEHBR/AMEMBASSY BRASILIA 0553 RUEHZN/ENVIRONMENT SCIENCE AND TECHNOLOGY COLLECTIVE

UNCLAS SECTION 01 OF 02 SANTIAGO 001046

SIPDIS

STATE FOR EEB/ESC/IEC, OES/STC, WHA/BSC

E.O. 12958: N/A

TAGS: <u>ENRG SENV PGOV TRGY CI AR</u> SUBJECT: ENERGY MINISTER TOUTS RENEWABLE ENERGY GOAL TO VISITING CODEL ENGEL, ASKS FOR INCREASED US TECHNOLOGY SHARING

SANTIAGO 00001046 001.2 OF 002

11. SUMMARY: During a Nov. 10 meeting with visiting members of Congress and the Ambassador, Energy Minister Marcelo Tokman highlighted Chile's dependence on foreign energy supplies and said the country intends to work towards a goal of meeting 20% of domestic energy needs through renewable sources. Tokman requested greater sharing of renewable energy technology. Chile is considering developing a nuclear energy program--a topic that was once taboo--and is interested in domestically-produced biofuels. CODEL Chairman Engel highlighted advances in alternative fuel vehicles in Brazil and Israel; Representative Maurice Hinchey promoted fuel cell R&D efforts by the Solar Energy Consortium in New York. End Summary.

## Tokman Outlines Chilean Energy Dependence

- ¶2. CODEL Engel members Representative Eliot Engel(D-NY) and Representative Maurice Hinchey (D-NY), accompanied by the Ambassador, State DAS Joel Starr, CODEL staffers, and EMBOFF met Nov. 10 with Energy Minister Marcelo Tokman, Executive Director Rodrigo Iglesias, Head of Research Claudio Huepe, Director of Environment and Renewable Energy Jaime Bravo and Deputy Director of International Affairs at the National Energy Commission, Corissa Petro to discuss energy issues facing Chile and opportunities for increased energy cooperation.
- 13. Engel began by stressing that countries cannot be free until they have achieved energy independence. Tokman then detailed the extent of Chile's dependence on foreign sources on energy. percent of Chile's energy consumption is generated by fossil fuels. Of these fossil fuels, 70% are imported, including 98% of all oil. Approximately 24% of Chile's energy needs are met by natural gas, all of which is imported from Argentina. Under the original supply contract between these countries, Chile was to receive 22,000,000 cubic meters of natural gas per year. Since 2004, however, the amount of natural gas received by Chile annually has fallen to between 500,000 and 2,000,000 cubic meters.

Chile Wants 20% of Energy from Renewable Sources

14. The Chilean government wants to meet 20% of Chile's energy needs with renewable sources, Tokman said. International assessments of Chilean geography have defined it as one of the best source countries in the world for solar, wind, geothermal and hydropower. The vast majority of Chile's energy investments, however, continue to be in traditional sources of energy, e.g. coal-fired power plants and larger hydroelectric projects. Tokman explained that, in order to reach the renewable energy goals the GOC has announced, the

government is attempting to identify the barriers that have historically prevented further development of these renewable sources.

15. The primary barrier to Chilean renewable energy development is a lack of technology. While Chile has ample renewable resources, there has been insufficient domestic development of the technology needed to convert raw energy materials into commercially viable sources of fuel. Tokman believes that increased and rapid transfers of technology to Chile from wealthier countries like the U.S. would allow Chile to better utilize its own energy sources and allow Chilean entrepreneurs to contribute their skills and resources to R&D efforts.

Chile Considering Domestic Nuclear Energy Program

16. The Chilean government recently began debating the pursuit of domestically-produced nuclear energy. While historically taboo, a majority in the government now feel Chile cannot flatly reject the development of a nuclear energy program before the subject has been thoroughly analyzed. A presidential advisory group on the issue has declared that nuclear energy is both safe and reliable now--provided all necessary infrastructure and safeguards are in place. The GOC is currently working with the International Atomic Energy Agency to assess what Chile needs to create this infrastructure; Tokman believes the final report will be ready for the next Chilean government to review. He estimates that current energy resources will continue to meet Chile's needs until approximately 2024 and, therefore, emphasizes that there is ample time for further discussion and careful development of a nuclear program. However, he also emphasized that Chile should not unnecessarily delay this process.

SANTIAGO 00001046 002 OF 002

## Biofuels and Solar Energy

- ¶7. Engel highlighted the use of flex-fuel vehicles in Brazil and a program for plug-in hybrid vehicles in Israel. Tokman stated that, until recently, it was illegal to sell gasoline-ethanol mixed fuels in Chile. Today, a mixture of up to 5% is permitted. While Chile is interested in pursuing biofuels as an alternative fuel resource, they are not currently considering large-scale importation of ethanol from Brazil. Tokman stressed that Chile's focus is on biofuels that can be produced domestically, such as algae. Chile is currently researching and testing methods of micro and macro algae cultivation for biofuel production.
- ¶8. Hinchey explained the growing U.S. focus on solar and geothermal energy as a means for establishing energy independence and stressed the incredible generation potential of both sources. He expressed concern that strong opposition from oil and coal companies makes it politically difficult to further develop alternative fuel technologies. He stated, however, that the Solar Energy Consortium, a partnership of universities and private companies in his legislative district, was working to expand fuel cell R&D to improve solar power storage. Hinchey stated that this technology can be improved quickly, and could result in U.S. energy independence within a decade. Tokman noted that with Chile's vast lithium and salt deposits—substances typically used in fuel cells—Chile is in an excellent position to contribute to these types of projects.

Joint U.S.-Chile Energy Research and Development

19. Tokman, Engel and Hinchey all stressed the importance of international cooperation in the development of alternative fuels. Tokman reasserted the need for strong partnerships between wealthy and developing nations with regard to energy development. Citing Chile's political and economic stability, its commitment to the rule of law, and its vast natural resources, Tokman described Chile as an ideal partner for the U.S. in the pursuit of renewable energy.

Tokman suggested the creation of pilot programs for testing U.S.-developed technology in Chile and stressed that the results of this kind of partnership could dramatically increase both countries' contributions to international efforts to develop alternative, renewable energy sources. Engel and Hinchey invited Tokman to meet with them in Washington to further discuss bilateral energy cooperation.

110. COMMENT: Chile's energy policies remain a bright spot for increased bilateral cooperation. Following a full day of meetings with the President, Foreign Minister, and Congress, this congressional meeting provided concrete ideas on how to advance U.S.-Chile cooperation. The Embassy plans to follow up on Tokman's interest in technology sharing by, inter alia, exploring possibilities for bringing one or more energy researchers to Chile via the Embassy Science Fellows Program. End Comment.

111. CODEL Engel cleared this message.

SIMONS